#### PROVISIONAL LIST OF THE PLANTS OF THE BAHAMA ISLANDS.

BY JOHN GARDINER, B. S. AND L. J. K. BRACE.

Arranged with notes and additions by

CHARLES S. DOLLEY, M. D.

Introductory Note.—The circumstances under which this Provisional List was prepared are as follows: In the year 1886, I held the post of Scientific Adviser to the Board of Agriculture of the Bahamas, and, in addition to my regular duties, was requested by his Excellency, Governor H. A. Blake, to prepare a list of the flora of the colony. I was directed to give the common names of the plants and their medicinal and other uses; this latter requirement accounts for the frequently (to scientific readers) gratnitous information. At the same time, I was furnished with a list of the plants of New Providence, prepared some years before by Mr. L. J. K. Brace, a Nassau gentleman, afterwards (1886) an assistant in the Botanical Gardens of Calcutta, With this as a basis I prepared and classified the following list. In the course of the year I visited many of the "out-islands," and was enabled to make considerable additions to Mr. Brace's list, which, however, was exceedingly useful. I regret much that his name is not attached to the plants whose occurrence he described: this is due to the fact that I was obliged to leave Nassau a month earlier than I had expected, and before I could prepare a final copy of the list.

It was intended that the list should be published by the Board of Agriculture, whose property it was, but this was not done, owing to the very small funds of the Board. Governor Blake placed it in the hands of my friend Prof. Charles S. Dolley, who has made numerous additions to it, and to whom is due the credit of its present publication.

The list is called "Provisional" mainly because it is not backed throughout by herbarium specimens, though in any case it must have been incomplete. Prof. Dolley has placed in the herbarium and green-house of the University of Pennsylvania specimens covering nearly all his additions, and the plants listed as having been collected by Prof. Herrick, are represented by herbarium specimens. (Johns Hopkins Univ. Circ., Vol. VI, No. 18, p. 46.)

Herborization in so damp a climate as that of the Bahamas is attended with some difficulties, which are considerably increased

when the work has to be done on board of a 20-ton sponging schooner. I found, too, that other duties of more practical use to the colony left but little time for this, so I adopted the plan of collecting what plants I could, and diagnosing them while still fresh by the aid of Grisebach, and Maout and Decaisne (Hooker's Ed.), not making any attempt to preserve the specimens, as a rule. This, of course, would have been simply inexcusable if the making up of a Bahama Flora had been my main duty. Thus the list is necessarily very imperfect, and much in need of confirmation.

The islands from which the most interesting results are to be expected, when they are explored, are Andros, Bimini, Inagua, with Mayaguana and Atwood's Cay. Andros (really a group of islands) contains many fresh-water ponds in its northern half. I visited it, with instructions to investigate its agricultural capabilities, a month after I arrived in the colony (1885), when everything was quite new to me, and before my books, etc., had arrived. I was unable ever to visit it again; but it is pretty certain that good results may be obtained from its exploration. Bimini is on the margin of the Gulf Stream, and I expected interesting "finds" there, but my books were lost overboard in landing, and I was unable to identify what new plants I saw. Its waters are rich zoologically, and on account of its position it deserves botanical investigation. Inagua and the two small islands mentioned are separated from the rest of the archipelago by deep "oeean" water. I made two separate attempts to reach them, but was foiled, once by bad weather, the other time by the theft of my schooner by a Havtian negro. Atwood's Cay is said to possess a small mammal, the Utia or Outi (Capromys) not elsewhere found in the colony; and during my time in the Bahamas, a living alligator was washed ashore on a log of mahogany at Inagua, having probably come from Hayti. Reasoning by analogy, these islands ought to be interesting botanically.

The distribution of natural orders in the different islands would be worth attention. I was not able to pay much attention to this, and the book in which I had made some notes on the subject was lost at Bimini; but such facts as the restriction of the Bahama Pine to the northern islands (Abaeo, Bahama, Berry Islands, New Providence and the northern half of Andros), and the greater number and variety of Caeteae in the more southerly islands indicate what there is to be done. Roughly speaking, the flora of the northern islands generally resembles that of Bermuda (cf. Bulletin No. 25, U. S.

National Museum, also, Plants of the Bermudas, O. A. Reade, Bermuda, 1885). The flora of the more southern ones while still generally resembling that of Bermuda, also shows affinities with that of the Greater Antilles. Probably the flora of Inagua will be found to be much like that of Hayti and Eastern Cuba. Some Florida plants are found in the Northern islands, but it is a question whether they have come from Florida, or gone from the Bahamas.

A grant was made by the British Association, in 1887, for the investigation of the Bahama Flora, and Baron von Eggers of St. Croix, known for his work in the Lesser Antilles, has accordingly been in the Bahamas during the last year; but I have seen nothing of his results beyond a letter in "Nature" of April 12, 1888, p. 565.

All such plants as have heretofore been listed and the additions made to this list by Professors Dolley and Herrick, are followed by the collector's name in brackets.

JOHN GARDINER.

## CRYPTOGAMIA.

## A CR OGENS.

#### Class I. ALGAE.

Subclass I. Melanospermeæ, or Olive colored Algae.

Order I. FUCACEÆ.

1. Sargassum affine, J.Ag.

Gulf weed. Air vesicles spherical pointless. (Dolley.)

2. Sargassum bacciferum, Ag.

Gulf Weed, Tropical sea grape. (Dolley.) Air vesicles spherical, tipped with a longish bristle.

Subclass III. Chlorospermeæ, or Green Algae.

#### Order I. SIPHONACEÆ.

- 1. Caulerpa, several species. (Dolley.)
- 2. Halimeda opuntia, Lamour. (Dolley.)
- 3. Halimeda tridens, Lamour. (Dolley.)
- 4. Eudotea flabellata, Lamour. (Dolley.)

# Order II. DASYCLADEÆ.

1. Acetabularia crenulata, Lamour. (Dolley.)

Tufts two or three inches high, consisting of slender stalks bearing peltate disks or cups, radiated like mushrooms; green, coated with lime, rocks and corals, near shore and in Waterloo Lake.

#### Order III. VALONIACEÆ.

1. Penicillus phœnix, Lamk.

Mermen's shaving brushes. New Providence. (Dolley.)

#### Class. FILICES.

Order POLYPODIACEÆ. True Ferns.

- 1. Acrostichum aureum, L. Abaco. (Herrick.)
- 2. Adiantum tenerum, Swz. (Swains.) (Herrick.)
- 3. Aneimia adiantifolia, Swz.
  Abaco. Green Turtle Cay. (Herrick.) New Providence. (Dolley.)
- 4. Aspidium patens, Swz. (Griseb.)
  Abaco. (Herrick.) New Providence, a very hairy variety. (Dolley.)
- 5. A. incisum, Gr. (Fraser.)
- 6. A. trifoliatum, Sw. (Griseb.)
- 7. A. adiantifolium, Szv. (Szvains.)
- 8. Davalia clavata, Swz. (Swains.)

  Abaco. (Herrick.) New Providence, abundant near, "Banana holes." (Dolley.)
- 9. Polypodium incanum, Swz. Abaco, on trees. (Herrick.)
- 10. P. Phyllitidis, L. New Providence. (Dolley.)
- New Providence. (Dolley.)

  11. P. Swartzii, Baker.
- New Providence, on shrubs. (Dolley.)
- 12. Taenitis lanceolata, R. Br. Abaco, on trees. (Herrick.)
- 13. Pteris longifolia. L. (Swains.) New Providence. (Dolley.)
- 14. Pteris aurea, L.

New Providence, on the trunks of scrub Palmettoes. (Dickinson and Dowd.)

# PHANEROGAMIA.

#### GYMNOSPERMIA.

#### Order I. CYCADEAE.

1. Zamia angustifolia, Jacq.

Bay-rush. Indigenous. Pith furnishes starch fit for food and for laundry purposes, sold in Nassau by negroes from Andros, and from outlying districts of N. P.

2. Cycas revoluta, Thunb.

Bastard Sago-palm. Common in gardens; originally from Asia (China and Japan), but found in many countries, even in New Guinea. Pith furnishes a kind of sago.

## Order II. CONIFERAE.

1. Juniperus Barbadensis, L. (Griseb.)

Bermuda Cedar. Indigenous; furnishes timber and wood suitable for lead-pencils.

2. J. Virginiana, L. Abaco. (Herrick.)

3. Pinus Bahamensis, Gr. (Griseb. Dolley; von Eggers; Urban.)

Grisebach states that at the time of writing (1864) the cones only of this tree were known and that "it may belong to the section Tecda." In this surmise he was correct, as can be seen by the specimens of cones and foliage in the Univ. of Pennsylvania, and in the Bot. Mus. Berlin. Shr'k 8. It resembles very closely P. Tecda var. heterophylla, now known as P. cubensis Gr. Bahama pitch-pine, Loblolly pitch-pine. Indigenous. Timber poor; fit for turpentine, of which a certain amount was made on Andros and other islands for the use of the Confederacy during the American Civil War.

# ANGIOSPERMIA.

# MONOCOTYLEDONS.

# Order I. CANNACEAE.

1. Canna Indica, L.

"Indian Shot." In gardens. West Indian.

2. C. coccinea, Ait.

Said to be natives of India, but now found in most tropical countries.

3. Maranta arundinacea, L.

Arrow Root. Tropical America. Many members of this order yield a useful starch; e. g. M. arundinacea, Cr edulis (fleshy rhizome) and others.

## Order II. ZINGIBERACEAE.

1. Alpinia nutans, Rox.

Shell-plant, Ginger. In gardens. Tropical America.

2. Costus sp.?
Wild Ginger. West Indian.

3. Zingiber officinale, Rox.

Ginger. Cultivated. E. India. The members of this order are used as aromatic stimulants, in medicine In some forms of dyspepsia; used as condiment.

#### Order III. MUSACEAE.

1. Musa paradisiaca, L.

Plantain. Originally from the E. Indies.

2. M. sapientum, L.

Banana. Originally from the E. Indies. These two fruits are too well known to require description. From the leaf-stalks of other members of this order, wood-fibre is prepared.

## Order IV. BROMELIACEAE.

1. Ananassa sativa, Lindley.

Pine-apple, from Brazil originally. Extensively cultivated for export. Grows best in a peculiar red soil formed by the disintegration of the coral rock, and occurring most extensively in Abaco, Eleuthera, Cat Island and Long Island.

2. Bromelia Pinguin, L.

Wild Pine, Pinguin. Indigenous. Good fibre is obtained from the leaves. The fruit is the size of a plum, and is an excellent vermifuge.

- 3. Tillandsia utriculata, L. Wild Pine. Indigenous.
- Wild Pine. Indigenous.
  4. T. usneoides. L.

Old Man's Beard. Florida Moss. West Indies and Southern States.

- 5. T. fasciculata, Sw. (Swains.)
  Wild Pine. Indigenous.
- 6. T. recurvata, L. (Griseb.)
  Wild Pine. Indigenous.
- 7. T. bulbosa, Hook. Wild Pine. Abaco. (Herrick.)
- 8. T. canescens, Sw.?
  Wild Pine. Abaco. (Herrick.)
- 9. Catopsis nutans, Gris.?

Epiphytic Bromeliad, Wild Pine. Abaco. (Herrick.) Many plants in this order yield very fine silky fibres. The unripe fruit of

the Pine Apple and the Pinguin and of other species, is vermifuge and diuretic.

#### Order V. ORCHIDEAE

- 1. Epidendrum aciculare, Batem. (Lindley.) Indigenous.
- 2. E. gracile, Lindl. Indigenous.
- 3. E. rufum, Lindl. (Lindley.) Indigenous.
- 4. E. altissimum, Batem. (Lindlev, Dolley.) Indigenous.
- 5. E. Bahamense, Gray. (Swains.) Indigenous.
- 6. E. plicatum, Lindl. (Swains.) Indigenous.
- 7. E. cochleatum, L. (Catesò.)
  Indigenous. Pansy Orchid.
- 8. E. nocturnum, L. (Catesb.) Indigenous.
- 9. Bletia purpurea, D. C. (Swains.)

Indigenous. Common purple Orchid. Purple orchid tubers made into tea are good for fish poisoning. In Andros they are used for cuts, and called wild ginger.

- 10. Bletia sp.? Indigenous.
- 11. Spiranthes tortilis, Rich. Probably Indigenous.
- 12. S. picta, Lindl.?
- 13. Oncidium Guibertianum, Rich. (Herrick.)

Epiphytic orchid. Abaco.

Very few orchids of any kind are of use to man and none of the Bahama species are among these.

## Order VI. IRIDEAE.

- 1. Iris versicolor, L.
- 2. I. violacea, Swiet.
- 3. I. Florentina, L.

All of these kinds of Iris are cultivated in gardens.

4. Gladiolus sp. ?

In gardens.

The Iris root is purgative and emetic and is used in preparing orris.

#### Order VII. AMARYLLIDEAE.

1. Agave Americana, Linn.

American Aloe, from Continent; American Agave, Century Plant, Maguey, Magaly, Spiked Aloe, Mexican Maguey, Flowering Aloe, Pita.

2. A. Mexicana, Lam.

Mexican Aloe, Pita, Manilla plant, from Mexico; Sisal hemp.

3. A. variegata, Hort.

In gardens. Partridge Breast Aloe.

4. A. striata, Luc.

In gardens.

5. Eucharis Amazonica, Lindl.

Eucharist Lily. In gardens, from Brazil.

6. Narcissus Jonquilla, Linn. In Gardens. Jonquil.

7. Pancratium sp.?

Spider Lily. Old and new world in gardens.

8. Amaryllis Atamasco, L.

Atamasco lily. Gardens.

9. Crinum sp.?

Essequibo lily. Gardens.

10. Crinum erubescens, Herb.

Squill lily.

Most of the members of this order are ornamental plants, but some are of great economic value. Agave Mexicana and others of the genus yield a fine fibre, known as Pita, Sisal or Manilla fibre. The efforts of Governor Blake and one of the authors to promote the cultivation of these fibres in the colony long appeared unavailing; but now (Feb. 1889), it appears that the cultivation has been begun in earnest. The soil is well suited for these plants, but the want of energy and of eapital among the people must make the issue of the experiment doubtful, as yet. A Mexican Agave yields the drink ealled Mescal. The flowering stalk is used for corks and for razor strops. The juice of the leaves is sometimes used as a resolvent for scrofula and caneers.

## Order VIII, DIOSCOREAE.

1. Dioscorea sativa, Griseb. Common Yam.

2. D. alata, Linn,

White Yam Negro country Yam, and probably several other species. *D. sativa* includes several varieties. Yams are indigenous in all tropical countries, but the kinds cultivated for food appear to have been introduced from the East Indies, though this is not certain.

3. Rajania hastata, Linn.

Wild Yam. In woods.

Dioscoreae are chiefly and exceedingly valuable as food from the abundant starch their root tubes contain. They contain an acrid principle, which is removed by cooking. The leaves of some species are used in intermittent fevers.

## Order IX. ALISMACEAE.

1. Sagittaria lancifolia, L.

Arrow head. Indigenous. Sagittaria has the reputation of being good for hydrophobia, mainly on account of its being a water plant. The rhizomes when cooked are eatable. The members of this family possess very astringent properties, and have been used in the preparation of ink.

#### Order X. JUNCAGINEAE.

Triglochin, near T. striatum, R. & P.
 This order is of no known use to man.

## Order XI. POTAMEAE.

1. Potamogeton sp. ? Pondweed.

Pondweed. This order has no known properties.

#### Order XII. NAITDEAE.

1. Thalassia Testudinum, Koen.

Turtlegrass, Manatee grass. Marine. Serves as food for turtles, and in Jamaica waters for the Manatee.

## Order XIII. PALMAE.

1. Areca Catechu, L.

Betel-Nut Palm. One specimen in Nassau, called Pianang, native of Cochin China, Malayan Peninsula and Islands.

## 2. Oreodoxa regia, Kth.

Royal Cabbage Palm. Several specimens in Nassau and throughout the colony. West Indian.

# 3. O. oleracea, Mart. (Coll. Mart.)

Barbadocs Cabbage Palm. West Indies. From the tree of this genus is obtained the so-called cabbage, which consists of the young leaf bud, and is eaten boiled or pickled. The pith affords a kind of sago. From the fruit oil is obtained.

# 4. Sabal umbraculifera, Mart. (Coll. Mart.) Royal Palmetto. Fortune Island. (Eggers.)

## 5. Palmetto, Lodd.

Fortune Island, very common and used for making hats. (Eggers.) Palmetto leaves when young and undeveloped are an excellent vegetable or "cabbage," and later are used for thatch and for making baskets, mats, etc., of best quality. The stem of T. parviflora furnishes timber, and fibre is obtained from S. umbraculifera. The roots are rich in tannin and very astringent. Caues of Palmettowood readily break diagonally, and so can be used as daggers, the edges being very sharp. On this account their use is forbidden in Cuba.

# 6. Thrinax parviflora, Sw. (Catesb.) Fan Palm, Royal Palmetto, Palmetto Thatch.

# 7. T. argentea, Lodd. (Catesb.) Silver leaved palmetto, Silver thatch.

## 8. Cocos nucifera, Linn.

Cocoa nut, Porcupine wood, Palmyra wood, Cocoa Palm. Introduced from West Indies; originally from Indian Archipelago or from Islands west of Panama. It is needless to mention in detail the manifold uses of this palm. One summary of them says, that it yields sugar, milk, solid cream, oil, wine, cloth, cups, wood for building, thatch, etc. Cocoanut oil is obtained by pressing the albumen when fresh; it is transparent, and is used in cookery; used in England under the name of Copra. The thicker portion, stearine, is used in making candles, the clear oil for burning in lamps; for affections of the chest. It is mildly depurative and laxative. Glycerine is obtained from it. The fibre is used for "Coir" ropes, matting, brushes, brooms, upholstery, etc. (Smith Dict., Econ. Pl.) Its young leaves are excellent "cabbage". The pulp and milk of young nuts are said to be strongly anthelmintic.

9. Euterpe oleracea, Mart.

Cabbage Palm. 12-25 ft. high. Every where, except Abaco, Bahama, Andros, Eleuthera, Berry Islands. "Cabbage" used as food for hogs; this appears to be causing the extinction of the palm.

### Order XIV. TYPHACEAE.

1. Typha latifolia, Linn.

Cat's Tail, Bulrush, Reed-Mace. Extends from Brazil to Texas. The young shoots are eatable when boiled, and also the rhizomes, which are astringent and diuretic, and used in Asia for dysentery. The pollen is made into bread in India and New Zealand.

#### Order XV. AROIDEAE.

1. Colocasia esculenta, Seh.

Shot Eddoe, Indian Kale. From E. Indies. "Taro" is the general name for the species of *Colocasia*; C. esculenta is also called "Scratch coco."

- 2. Caladium maculatum, Lodd.

  Bleeding heart. E. and W. Indies.
- 3. C. bicolor, Vent., etc.
  Bleeding heart. E. and W. Indies.
- 4. Richardia Æthiopica, Kunth.

White Arum, Calla Lily. From Cape of Good Hope.

The rhizomes and leaves of *Aroideae* contain an acrid juice, sometimes a violent poison; but an abundance of nutritive starch is obtained from the rhizomes of *Colocasia* and *Caladium*, the Eddoes Aroideae are said to have diuretic and expectorant properties.

## Order XVI. LILIACEAE.

1. Yucca aloifolia, Linn.

Adam's Needle, Spanish Bayonet, Dagger Plant. From Southern U.S.

- 2. Lilium candidum, Linn. In gardens.
- 3. L. Japonicum, Linn. Easter lily.
- 4. Polianthes tuberosa, Linn.
  Tuberose. In gardens. From E. Indies.
- 5. Aloe vulgaris, Willd.

  Medicinal aloe. East and West Indies.

## 6. Allium,

Several species cultivated, onions, leeks, etc.

The bulbs of lilies are rich in starch, and in some places are used as food. The fruits of *Yucca* are purgative; its leaves afford fibre used in paper-making. The roots of some species are used for soap in Southern Colorado, New Mexico, etc., a use apparently unknown in the West Indies. Aloes have never been cultivated to any extent, though conditions are favorable.

## Order XVII. SMILACEAE.

1. Smilax Havanensis, Jacq. (Swains.)

China-withe. Indigenous or from Jamaica.

The various species of *Smilax* furnish Sarsaparilla, well known as an alterative. The root of a *Smilax*, apparently *S. balbisiana*, is known here as China-root, and is used by the bush-doctors in syphilis.

#### Order XVIII. COMMELYNEAE.

1. Tradescantia discolor, Sw.

Oyster-plant. Naturalized from West Indies.

2. Commelyna elegans, Kth.

Little is known of the properties of this order. The name "Oyster-Plant" is taken from the appearance of the flower-buds.

#### Order XIX. CYPERACEAE.

- 1. Cyperus polystachyus, Rottb.
- 2. C. compressus, L.
- 3. C. Luzulae, Rottb.
- 4. C. rotundus, Linn. Nut grass.
- 5. C. Vahlii, Steudel. (Herrick.)
- 6. Cladium occidentale, Schrad. (Griseb.) Prickly Sedge.
- 7. Rhynchospora sp.?
- 8. Scleria filiformis, Sw.
- 9. Dichromena leucocephala, Michx. Common.

10. Fimbristylis spadicea, Vahl.

Members of this family have very few useful properties. I do not know of any that are used medicinally in this colony. The rhizomes of *C. rotundus* are said to be diuretic and astringent.

## Order XX. GRAMINEAE.

- 1. Arthrostylidium, sp.? Bamboo. West Indies.
- 2. Chusquea sp.?
  Bamboo. West Indies.
- 3. Bambusa vulgaris, Schrd.

Bamboo. In a few gardens. Cosmopolitan, common throughout tropical Asia and America. Height 100 ft. or more. Used for house building, water pipes; young stems for paper making, for which purpose it is cultivated in East and West Indies.

- 4. Eragrostis plumosa.
- 5. E. pectinacea, Gray.
- 6. E. ciliaris, Lk.
- 7. Sporobolus Virginicus, Kth.
- 8. S. tenacissimus, P. B.
- 9. Stipa. sp.? Feather grass.
- 10. Oryza sativa, L.
  Rice. Cultivated sparsely. China.
- 11. Chloris ciliata, Sw.
- 12. Chloris radiata, Sw.
- 13. Dactyloctenium Ægyptiacum, Willd. (Hjalmars.)
- 14. Eleusine Indica, G.
- 15. Cynodon Dactylon, Pers. (Griseb.)
  Bahama Grass, Devil grass.
- 16. Paspalum? Wire grass.
- 17. Digitaria sanguinalis, Scop.
- 18. Stenotaphrum Americanum, Schrk.
- 19. Panicum grossarium, L.
- 20. P. divaricatum, L.
- 21. P. dichotomum, L.
- 22. Setaria glauca, P. B.
- 23. Cenchrus echinatus.

A decumbent variety. (Hjalmars.) Bur Grass.

24. C. hirsutus, L. (Herrick.) Courage Bush.

- 25. C. tribuloides, L. (Herrick.)
- 26. Tricholaena leucophaea.
- 27. Andropogon Schoenanthus, L.

Lemon Grass, Citronella. India. Grows wild and cultivated, yields essential oil used in perfumery.

28. Anatherum macr urum, Gr.

Fox Tail Grass.

## 29. Saccharum officinarum, L.

Sugar Cane, cultivated, originally from Asia. See in this connection, "Remarks on the East India and other Canes imported into the French Caribbean Islands, and lately introduced into the Island of Antigua, by Sir John Laforey, Bart. in Edward's Hist. of Brit. Col. in the W. I. Preface to 2nd Edit. p. 32.

#### 30. Zea Mais. L.

Indian Corn, Maize. According to Edwards (Hist. of the West Indies, I, p. 15), this name is derived from the word "Mahez," applied by the aborigines of the West Indies to this plant. Cultivated. America.

## 31. Sorghum vulgare, Pers.

Guinea Corn, cultivated; from the old World.

## 32. Uniola paniculata, L. (Swains.)

Spike Grass. Common along sand beaches in the Bahamas, as well as along southern coast of U.S.

Grasses are valuable as food for cattle and for man. In the Bahamas, Maize and Guinea Corn are much used, and also Sugar Cane, though but little sugar is made, owing to the prohibition of the manufacture of rum. The cane is of poor quality, short-jointed, fibrous and deficient in sugar, and is used mainly an naturel as a sweetmeat. Cane syrup is made in small quantity and used instead of molasses or maple syrup. The true Bamboo (Bambusa) is grown in some gardens. Arthrostylidium and Chusquea, known as Wild Bamboo, are more or less twining plants found in the bush. The lemon-grass, Andropogon Schoenanthus, is made into a cooling febrifuge. Cynodon Dactylon is emollient and aperient. A troublesome grass, known as Bur-Grass, grows abundantly, and in Andros and other islands, according to Governor Blake, renders the raising of sheep or cattle impossible, it having a very rough bur.

## ANGIOSPERMIA.

# DICOTYLEDONES.

## Order, I RANUNCULACEAE.

1. Clematis Vitalba, Linn.

Virgins Bower. Indigenous and nearly cosmopolitan.

2. Delphinium, sp.?

Larkspur, Stavesacre. Indigenous from old world. Seeds contain active principle, yield an extremely acrid poisonous alkaloid called Delphinia, originally employed as a cathartic, but discarded because of its violent action; and to destroy parasites.

This order chiefly inhabits temperate and cold climates. Most of its members have acrid and vesicant properties and are sometimes very poisonous.

#### Order II. ANONACEAE.

1. Anona muricata, L. Sour Sop. West Indian.

2. A. palustris, L.

Alligator Apple, Cork Wood, Monkey Apple. Common on low islands near the sea, unpalatable to man, liked by alligators. West Indian and South American.

- 3. A. sericea, L. Sweet Sop. West Indian.
- 4. A. squamosa, L. Sweet Sop, Sugar Apple. W. I.
- A. reticulata, L.
   Custard Apple. W. I. "Bullock's Heart."
- 6. A. laurifolia, Dun. (Catesb.)

  Tree like the peach only taller.

The fruits of this order are well known. That of Anona palustris is said to be narcotic, but I have eaten it with impunity. The wood of the same plant is exceedingly light and compressible, and can be used instead of cork. It is said in the Bahamas that a decoction of the root of A. muricata is an antidote to fish poison and will destroy Chigoes. A leaf of A. squamosa laid on a pillow is said to attract bugs, so they can be killed. A. reticulata is employed as an antidysenteric and vermifuge.

## Order III. PAPAVERACEAE.

1. Argemone Mexicana, L.

Mexican Poppy, Prickly Poppy, Yellow Thistle, Fin-Bush. Naturalized, from Mexico and Southern U.S. (Green Turtle), Herrick.

The narcotic properties of this order are well known. Argemone is used here by the bush doctors for the small-pox. Its seeds have been used elsewhere as a substitute for Ipecacuanha; its juice is said to destroy warts, to be efficacious against bites of venomous serpents, and to be useful in ophthalmia.

### Order IV. CRUCIFERAE.

- 1. Sinapis Brassicata, L. Mustard. West Indies.
- 2. Lepidium Virginicum, L. Pepper Grass. U.S.

Besides these species, which are wild, a large number of others are cultivated, including many of the kitchen vegetables, e. g. Cabbage, Cauliflower, Kale, Turnips, Radish, Cress, Sea-Kale, Horse-radish. None of the plants in this order are poisonous. Most of them are anti-scorbutics; mustard taken internally is an emetic and diuretic, externally a blister.

3. Cakile æqualis, L'Her. (Hjalmars.)
Turks Island.

## Order V. CAPPARIDEAE.

1. Crataeva Tapia, L.

Garlic Pear Tree, native of West Indies, called in Jamaica, Garlic Tree, from odor of its fruit. Catesby says that land-crabs feed on this in the Bahamas.

2. Cleome pentaphylla, L. (Swains.)

Mustard, Sambo. Naturalized throughout West Indies. Originally from old world. This is reputed in the Bahamas to have many useful properties. Boiled, it forms an excellent vegetable. Its leaves per se heal sores and relieve the pain of the gout. In oil, they cure skin diseases, especially leprosy. Boiled in water, it causes expectoration and relieves flatulency. The juice of the plant mixed with oil and dropped into the ear relieves deafness. The properties of the order are similar to those of the preceding one.

## Order VI. MORINGEAE

1. Moringa pterygosperma, G.

Horse-radish Tree, Ben-nut Tree. The root of this tree, finely scraped, is eaten as horse-radish. The oil of Ben, obtained by expression from the seeds, is much used by perfumers, and by machinists, because it does not freeze or become rancid.

## Order VII. VIOLACEAE.

Species of *Viola*, such as *V. odorata*, Sweet Violet, are cultivated in gardens in Nassau for their flowers.

## Order VIII. CANELLACEAE.

1. Canella alba, Murr. (Grisebach.)

Bahama White Wood Bark, Wild Cinnamon, White Canella, Wild Canella, False Winter's Bark. The bark from this tree is exported from the Bahamas; it is known in commerce by the foregoing names. It is an aromatic stimulant, tonic and cordial and yields by distillation an oil with the same properties.

# Order IX. BIXINEAE.

- 1. Xylosma nitidum, As. Gray.
- 2. X. buxifolium.
- 3. Xylosma sp.?
- 4. Casearia lactioides.
- 5. C. serrulata, Sw.

All West Indian and indigenous. I know nothing of the uses of any of these plants. The order as a whole has (fully) bitter and astringent properties. Some of its members are poisonous.

## Order X. POLYGALEAE.

1. Polygala sp. ?

Milk-wort; almost cosmopolitan.

2. Badiera Domingensis, Jacq.

Bastard Lignum vitae. West Indies.

3. Bredemeyera sp.?

West Indian and South American.

This order has tonic and astringent properties. Badiera Domingensis is a sudorific like Lignum vitæ. Some species of Polygala are said to act as antidotes to snake bites. Bredemeyera is used against syphilis in Trinidad.

# Order XI. PORTULACEAE.

1. Portulaca oleracea, L.

Purslane. Tropical countries.

2. Sesuvium portulacastrum, L.

Sea-side Purslane. All tropical countries.

Portulaca is used as a Pot herb and in salads, and is cooling, astringent, antiscorbutic.

## Order XII. TAMARISCINEAE.

1. Tamarix Indica. Willd.

Tamarisk. From Asia. Grown in some gardens in Nassau.

## Order XIII. HYPERICINEAE.

1. Ascyrum hypericoides, L. (Swains.)

St. Andrew's Cross, Peter's Wort. Indigenous, American, astringent, diuretic.

### Order XIV. GUTTIFERAE.

1. Mammea Americana, L.

Mammee, Mammee Apple. Indigenous in West Indies. Oil of seed used for hair oil. Tree upon being wounded yields thick yellow gum. Used as a cure for itch, and to prevent Chigoes from attacking the feet. The bark is a powerful astringent, poisonous.

2. Calophyllum Calaba, Jacq.

Galba, Santa Maria Wood, Calaba Tree. Fruit contains one seed yielding an oil fit for lamps. Tropical America, West Indies, Brazil.

The gum-resin secreted by trees of this order is acrid and purgative. The Manimee is a well-known fruit; its seeds are anthelmintic; an aromatic liquor (*Eau de Creole*) is distilled from its flowers. The wood of *Calophyllum* is fit for shingles and heavy work; and its resin is useful as an application to ulcers.

## Order XV. MALVACEAE.

Sida carpinifolia, L.
Wire-weed. Indigenous. America and West Indies.

2. S. spinosa, L. E. & W. I. and America.

3. S. urens, L. Indigenous. America, W. I. and Africa.

- 4. Abutilon filiforme, Jacq. W. I. and Africa.
- 5. A. permolle, G. Don. (Swains.) Indigenous.
- 6. A. Indicum, G. Don.
- 7. Abelmoschus moschatus, Mchx.

Musk Ochra. Native of Bengal, naturalized in all tropical countries.

- 8. A. esculentus, W. A. Ochra, Gumbo. Naturalized from Africa.
- Hibiscus Rosa-Sinensis, L.
   Red Hibiscus. Naturalized from gardens in Asia.
- 10. H. Phoeniceus, Jacq. In gardens.
- 11. H. Sabdariffa, L. Red or Indian Sorrel. In gardens.
- 12. Gossypium Barbadense, L. Cotton. Cultivated. America.

13. G. sp.

Red or Harbor Island Cotton. Harbor Island, wild. Distinguished by colored cotton adhering to green seeds. Comparison with specimens of colored cotton in the Botanical Museum of Berlin show this to resemble more nearly Gossypium probiculatum Klstrsch., being of a more uniform reddish-brown than G. religiosum, and not so dark as G. herbaceum var. lana rufa, of Porto Rico and Cuba. (Collected by Krug and Urban.) It is very similar, when manufactured, to Nankeen cotton. Its color resists bleaching agents, sun, acids and alkalies, and has been used by the Harbor Islanders for making gloves. Its color seems to become darker in rich soils. Samples sent to the Colonial Exhibition, London, 1886, attracted much and favorable attention. It seems worthy of cultivation. First account Sebartz, Stockh. Handl., 1790.

14. Eriodendron anfractuosum, D. C.

Silk-cotton Tree, Ceiba. S. America. Naturalized in West Indies. The large specimen at Nassau is said to have been brought from South Carolina, and to have given rise to all others on the island.

15. Helicteres Jamaicensis, Jacq. Screw-tree. W. Indian.

- 16. H. semitriloba, Berter. (Swains.) Indigenous.
- 17. Thespesia populnea, Corr. Sea-side Mahoe. Cork-tree.
- Malvaviscus arboreus, Cos.
   Var. Sagræanus, Rich. A shrub.
- 19. Sphæraclea abutiloides, Endl. (Catesby.)
  N. Providence.

This order is essentially tropical. Many of its members are cultivated in gardens for their flowers. The swollen calyx of Hibiscus Sabdariffa makes an excellent preserve, somewhat like cranberry, and used similarly. The unripe fruit of Abelmoschus is a well-known vegetable, valuable for its mucilaginous properties; it is said to be diuretic and useful in pulmonary diseases; its seeds are cordial and stomachic, and is said to improve the flavor of coffee. It is also used for scenting pomatum, etc. Most of the members of this order are mucilaginous and have demulcent and emollient properties; none are deleterious. The stems of species of Sida and Abutilon furnish very tenacious fibre, also Thespesia, whose unripe fruits are used in dyeing, and whose wood is fit for timber.

# Order XVI. STERCULIACEAE.

- 1. Melochia pyramidata, L. (Nichols.) Indigenous. A common weed.
- 2. M. tomentosa, L. (Iljalmars.)
- 3. Waltheria Americana, L.

All tropical countries. This order has similar properties to the preceding one. Waltheria is used as a febrifuge in S. America.

# Order XVII. TILIACEAE.

- Triumfetta althaeoides, Lam. Bur-weed. Indigenous.
- 2. T. semitriloba, L.

Bur-bark. Indigenous to all tropical countries.

3. Corchorus olitorius, L.

Jew's Mallow, Jute. Introduced from East Indies. Common in Syria where the young sprouts are eaten as a vegetable, like Asparagus. It is said to be a favorite with the Jews, hence its name. (Smith Diet. Econ. Pl.)

4. C. siliquosus, L.

Broom weed, Jute. W. Indies and S. America.

5. C. hirsutus, L. (Swains.)

This order has similar astringent and mucilaginous properties to those of Malvaceae. The species of *Corchorus* furnish valuable fibre known as jute, which is employed in the manufacture of many fabrics, from "Gunny bags" to satin; their young leaves boiled, are excellent pot-herbs. The leaves of *Triumfetta* are said to be useful astringents.

## Order XVIII. ERYTHROXYLEAE.

Erythroxylon brevipes, D. C.
 Eboe light wood, Red wood. Indigenous.

2. E. obovatum, Macf.

Indigenous.

To this order belongs the plant *E. coca*, used as a stimulant in Peru and Bolivia, from which the anaesthetic cocaine is obtained. Recent investigations show that the West Indian species contain but very small amount of the alkaloid, and they do not appear to be used as bush-medicine. Some species are used for dyeing, from the red color of the wood.

## Order XIX. MALPIGHIACEAE.

- Byrsonima lucida, Rich. (Swains.)
   Fortune Island. (Eggers.)
- Bunchosia glandulosa, Rich.
   West Indian Cherry. W. I. and S. America.
- 3. Malpighia setosa, Spreng. (Swains.) Indigenous, also in Hayti.
- Malpighia sp.?
   Near M. glabra. L. Wild Cherry, Barbados Cherry.
- 5. Stigmaphyllon Sagraeanum, Juss. (Swains.) Indigenous and in Cuba.
- 6. Triopteris rigida, Sw.

Narrow-leaved variety. (Swains.) Indigenous and in Cuba and Hayti. The plants of this order have medicinal properties and some of them, e. g., Byrsonia, Bunchosia, Malpighia, have eatable fruits. The order is distinctly tropical.

# Order XX. ZYGOPHYLLEAE.

1. Tribulus maximus, L.

Caltrop. A weed. W. Indian and throughout tropical countries.

2. Guaiacum sanctum, L. (Swains.)

Lignum vitae, Poek-wood. W. Indian and tropical America. Very plentiful on Acklin Island, Long Cay and Crooked Island, also on Fortune Island. (Eggers.)

The wood of Guaiaeum is largely used on account of its hardness, toughness and durability. The leaves are used for seouring floors. The resin is very valuable medicinally as a stimulant, diaphoretic and alterative, in gout and rheumatism and in syphilis, in which disease it is largely used in the West Indies and in this colony. A purgative syrup is made from the flowers in this colony.

## Order XXI. BALSAMINEAE.

Species of *Impatiens*, the Balsam of gardens, are eultivated for their flowers. From the E. Indies.

## Order XXII. AURANTIACEAE.

1. Citrus Aurantium, L.

Sweet Orange, Orange, Curacoa Orange, Nerolia Flowers, Forbidden Fruit, Golden Apple, Orange Apple. Native of Southern China. Early cultivated in Persia.

2. C. decumana, L.

Shaddock. Large ones called Pomeloes and small ones "Forbidden Fruit." Native of China. Introduced into W. Indies early in the 18th Century by Cap't Shaddock, hence the name.

3. C. racemosus, Ris, et Poit.

Grape Fruit. Wild in Northern India. Early eultivated in Persia.

4. C. Limonum, Ress.

Lemon. Fruit refrigerant, antiscorbutic. Peel furnishes oil of lemon.

5. C. Bigaradia, Dun.

Bitter Orange, Seville orange, Bigarade, Cassia lignea. This species is largely used for marmalades, candied orange peel and bitter tinetures.

6. C. spinosissima, Mey.

7. Glycosmis pentaphylla, D. C.

Mandarin Orange. Cultivated largely in China.

These various species all come from the E. Indies, China or the Malay Archipelago originally. The fruits are known everywhere. Bahama oranges are of fine quality, and a considerable number are exported to the U. S., but owing to want of care in gathering and packing, their price is low. Many so-called Florida oranges come from the Bahamas. Essential oils, used in perfumery and in the manufacture of liqueurs, are obtained from the rind and flowers. In medicine the acids of these fruits are used as refreshing laxatives and antiseptics.

# Order XXIII. XANTHOXYLEAE.

- 1. Xanthoxylum fraxineum, Willd. Prickly Ash, Yellow wood.
- 2. X. clava-Herculis, L. Hercules' Club, Prickly Yellow wood.
- 3. X. emarginatum, Desco.

All indigenous. The species of Xanthoxylum are medicinal. In the Bahamas the root of X. clava-Herculis is used as a poultice for ulcers, and the bark is chewed for tooth-ache. The wood yields a yellow dye; the bark is also regarded as anti-syphilitic in this colony. The young trees are made into walking sticks.

4. Fagara lentiscifolia, W. (Swains.)

#### Order XXIV. SIMARUBEAE.

1. Picramnia pentandra, Sw.

Bitter Wood. West Indies.

2. Alvaradoa amorphoides, Liebm. (Swains.)
Tassel Plant. All tropical coasts.

3. Picrodendron Juglans, Gr.

Jamaica Walnut. Jamaica. The plants of this order contain an exceedingly bitter principle, which gives them tonic properties. *Picramnia* is administered in this colony as a tonic and febrifuge.

## Order XXV. BURSERACEAE.

1. Bursera gummifera, L. (Mc. Nab.)

Mastic Tree, West Indian Birch, Jamaica Birch, Caranna Gum Tree, indigenous to this colony, Jamaica and East Indies.

Amyris sylvatica, Jacq.
 Torch Wood, Shrubby Sweet Wood. W. Indian. Indigenous.

3. Hedwigia balsamifera, Sw.

Bois eochon, Gum Elemi. West Indian.

The trees of this family yield resins which are used in the making of gum Elemi. It is said here to be good for pain in the back.

## Order XXVI. MELIACEAE.

1. Melia Azederach, L.

Pride of India, Azederach bark, Pride of China, Pride of Winter, Bead Tree, Pride Tree, Hoop Tree, African Lilac, China Tree. Asiatic. Naturalized.

2. Swietenia Mahogoni, L. (Catesby.)

Mahogany. W. Indian and tropical American. Fortune Island (Eggers.)

3. Cedrela odorata, L.

W. Indian Cedar, Jamaiea Cedar. Native of Honduras, Jamaiea and southern parts of tropical America; suited to all kinds of eabinet work, eolor reddish-brown, alliaeeous odor to the leaves and bark.

The trees of this family have many medicinal properties. *Melia* is purgative and vermifuge, but poisonous in large doses. The bark of the Mahogany is administered in fevers, with quinine, in tropical America.

## Order XXVII. OLACINEAE.

 Ximenia Americana, L. Wild Olive, Sea-side plum. Tropical America, Africa and Asia.

Schoepfia odorata. (Wall.)
 White beef wood. West Indies.
 Little is known of the properties of this order.

# Order XXVIII. ILICINEAE.

1. Ilex montana, Gr. Winter berry. W. Indian.

2. I. macoucoua, Pers.
Southern West Indies and Brazil.
The species of *Ilex* have diuretic and febrifuge properties.

# Order XXIV. CELASTRINEAE.

Myginda pallens, Sw. West Indian.

The plants of this order contain an acrid principle. The roots and leaves of *Myginda* are diurctic.

#### Order XXX. RHAMNEAE.

- 1. Condalia ferrea, Gr. (Swains.)
  Indigenous and West Indian.
- 2. Condalia sp.?
- 3. Colubrina ferruginosa, Breug. (Swains.)
  Saffron, Snake Wood, Green heart. Indigenous and West Indian.
- 4. Gouania Domingensis, L. Chew stick. West Indian.

The plants of this order have tonic febrifuge properties. *Colubrina* is employed, in infusion, in fevers in this colony. It is used in dyeing yellow. *Gouania* is used, as its popular name shows, as a toothbrush. It is said to have stomachic properties.

## Order XXXI. AMPELIDEAE.

- Ampelopsis quinquefolia, Michx.
   Virginia Creeper. Introduced from America.
- Vitis Caribaea, D. C.
   Jamaica Grape, Water Withe. West Indian and South American.
- 3. Cissus sicyoides, L. Sarsaparilla, China Root, Wild Yam. West Indian. These plants have acid and cooling properties.
- 4. C. acida, L. (Swains.)

## Order XXXII. SAPINDACEAE.

- 1. Serjania sp.?

  Tropical America. Climbing shrubs.
- 2. Thouinia discolor. Gr. (Swains.) Indigenous. Climbing shrubs.
- 3. Melicocca bijuga, L. Genip. Introduced from S. America.
- 4. Blighia sapida, Koen.

  Akee. Introduced from W. Africa. A handsome tree, 30 feet high.
- 5. Hypelata paniculata, Camb. Genip. Introduced from Jamaica.

Many of the plants of this order possess a saponaceous principle. Some of these are poisonous in whole or in part. The Genip has catable fruit and that of the Akec is eatable in part, and is used as a remedy in dysentery; the Akec is considered poisonous when raw, wholesome cooked. Serjania is very poisonous.

# Order XXXIII. TEREBINTHACEAE.

1. Rhus Toxicodendron, L. Poison Ivy, Poison Oak. America.

2. R. Metopium, L.

Burn-wood, Jamaica Sumach, Doctor's Gum, False Hog Gum. W. Indian and America.

3. Mangifera Indica, L.

Mango. Introduced from E. Indies. Leaves used for tanning, and powerful purgative and emetic, seeds farinaceous.

- 4. Anacardium occidentale, L. Cashew-nut. Tropical America.
- Spondias lutea, L.
   Spanish Hog plum. Hog plum of Jamaica. W. Indies.
- 6. Comocladia integrifolia, Jacq. Maiden Plum.

These plants have an acrid, sometimes very poisonous juice, but some of the fruits are largely caten, e. g. Mango and Cashew-nut. The eatable portion in this last case is the swollen peduncle upon which the nut is borne. The acrid oil in the nut is very poisonous, and is said in the Bahamas to kill Chigoes and cure freckles, and to be useful applied to ulcers. A decoction of the leaves is said also to be a useful wash for ulcers. The Cashew-nut and the Hog-plum are said to be good for dropsy. The fruit of the latter is used for feeding swine. The species of Rhus are poisonous.

The Mangoes of the Bahamas are of comparatively poor quality, the best are known as "Number Thirteen"—a variety which attains great perfection in Jamaica.

The island of Itamaraca, off the coast of Pernambuco, is said to produce the finest Mangoes in the Western Hemisphere.

#### Order XXXIV. LEGUMINOSAE.

Sub-Order I. MIMOSEAE.

Neptunia plena, Benth.
 Indigenous. West Indies and Tropical America.

- 2. Desmanthus virgatus, Willd.
  Indigenous. West Indies and East Indies.
- 3. Mimosa Bahamensis, Benth. (Swains.) Sensitive plant. Indigenous.
- 4. Leucaena glauca, Benth. (Swains.)
  Jumbai, Mimosa, Guaje. West Indies.
- 5. Acacia Bahamensis, Gr. (Swains.) Indigenous.
- 6. A. tortuosa, Willd.
  West Indies and S. America.
- A. Farnesiana, Willd.
   West and East Indies and Africa.
- 8. A. Coriophylla, Benth. (Swainson.) Indigenous.
- 9. A. acuifera, Benth. (Hyalmars.) Indigenous. Turks Island.
- A. (Albizzia) Lebbek, Willd.
   Black Ebony, Woman's Tongue. West Indies.
- Calliandra Portoricensis, Benth.
   South America and West Indies.
- 12. C. haematomma, Benth.

A variety having a strigose-pubescent corolla. (Swains.) Indigenous.

- 13. Lysiloma Sabicu, Benth.

  Horse-flesh, Sabecue. West Indies.
- Pithecolobium Hystrix, Benth. West Indies.
- 15. P. Unguis-cati, Benth. (Swains.) Ram's horn.

#### Sub-Order II. CAESALPINEAE.

1. Haematoxylon Campechianum, L.

Logwood, Blockwood, Campeachy wood, Jamaica logwood, Honduras logwood, St. Domingo logwood. W. Indies and Tropical America.

2. Guilandina Bonduc, L.

Yellow Nicker, Bonduc nut, Bonduc seed, Beasor nut, Yellow Nicker tree. Bonduc seed is tonic, astringent, anti-syphilitic, anti-periodic. West Indies.

- G. Bonducella, L. Slate colored Nicker. W. Indies. Indigenous.
- Caesalpinia pulcherrima, Sw.
   Pride of Barbadoes. E. Indics. Introduced by Mr. Saunders in
  1886 to N. P.
- 5. C. crista L., Sw. (Swains.)
  Bahama Braziletto. Indigenous.
- Lebidibia coriaria, Schlecht.Divi-Divi. South America and West Indies.
- Cassia bicapsularis, L. (Swains.)
   Senna. Indigenous. West Indies.
- 8. C. biflora, L. Senna. West Indies.
- C. occidentalis, L.
   Negro Coffee, Stinking-wood, Senna. All tropical countries.
- 10. C. ligustrina, L. (Dill.)
- 11. C. lineata, Sw. Senna. Jamaica and Cuba.
- C. glandulosa, L. Brown Cassia, Dutchman's Butter. West Indies.
- 13. C. Chamæcrista, Sw.
  Senna. United States and West Indies.
- 14. Tamarindus Indica, L.

Tamarind, Monkey-Tamarind, Black Tamarind, E. I. Tamarind, Indian Date. The fruit pulp is laxative, refrigerant, acidulous; leaves anthelmintic, bark tonic. From East Indics.

- Paullinia tomentosa, Benth.
   Mountain Ebony. West Indies.
- 16. Poinciana regia.
  Introduced from Madagascar.

Sub-Order III. PAPILIONACEAE. (Pea Tribe.)

- 1. Crotalaria stipularis, Des. Rattle-wort. West Indies.
- 2. C. verrucosa, L. (Griseb.) Indigenous.
- 3. C. pumila, Ort. Indigenous.

- 4. C. lotifolia, L. Jamaica and Tropical Africa.
- 5. C. retusa, L. (Griseb.)
- 6. Alysicarpus vaginalis, De.
  Introduced from West Indies.
- 7. Desmodium incanum, De. (Swains.) Honey suckle. Indigenous.
- 8. D. tortuosum, De. Cock's-head. Florida, South America and West Indies.
- 9. Stylosanthes procumbens, Sw.
  Trefoil. Indigenous. Common in pastures.
- Arachis hypogæa, L. Pea-nut, Ground-nut. Naturalized from Brazil.
- 11. Centrosema Virginianum, Benth. Var. angustifolium. (Hjalmars.)
- 12. Brya ebenus, Dc. Green Ebony. West Indies.
- 13. Abrus precatorius, L. Wild Liquorice, Crab's Eyes, Black-eyed Susan Tree, naturalized from East Indies.
- 14. Rhynchosia minima, De. Red bead vine, Wort herb. America, West Indies and Africa.
- 15. Rhynchosia, sp.?
- 16. Cajanus Indicus, Spreng.
  Pigeon Pea, Congo Pea. Called in India, Dhal; from Asia.
- Galactia filiformis, Benth. (Swains.)
   Indigenous and in East Indies and Australia.
- 18. G. pendula, Pers. Jamaica.
- Phaseolus lunatus, L.
   Lima or Sugar bean. West Indies, Tropical America, Africa and Asia.
- 20. P. semi-erectus, L. West Indies, South America and East Indies.
- 21. Canavalia obtusifolia, De.
  Red Sea-side bean. West Indies, South America, Australia and East Indies.

22. Mucuna urens, Dc.

Horse-eye bean. West Indies and Brazil.

23. Erythrina corallodendron, L.

Coral Tree, Red bean tree. West Indies and South America.

24. Piscidia Erythrina, L. (Swains.)

Jamaica Dogwood. West Indies. Used for poison by "surging" boughs, or bag containing bruised bark, leaves or roots in water. Bark, narcotic, sedative.

25. Peltophorum adnatum, Gr. (Swains.)

26. Sophora tomentosa, L.

All along tropical sea shore.

This large order yields more substances, useful in medicine and the arts than any other in the vegetable kingdom. Many of the plants enumerated above possess useful properties. Leucaena affords fodder for horses, but causes their tails and manes to fall off. Many species of Acacia yield gums sold as gum Arabic. A. Farnesiana has flowers which yield a perfume known as Cassie; it is cultivated in other countries on this account. It also yields a valuable gum. A. Lebbek yields an ornamental wood.

The species of Acacia have powerful astringent properties and are so used in medicine. The species of Calliandra have very beautiful flowers. Lysiloma furnishes a most valuable timber, well known in Cuba as Sabecue, in the Bahamas as "horse-flesh mahogany." The bark of Pithecolobium is astringent.

Haematoxylon is the well-known dye wood, and has tonic and astringent properties. Guilandina produces the yellow and slatecolored Nicker beans. They have tonic properties and have been used successfully in intermittent fevers. Caesalpinia pulcherrima is a handsome garden shrub, and in the East Indies its leaves are used as Senna. C. crista is the Bahama Braziletto, valuable as a dye wood. Lebidibia coriaria is the Divi-Divi, whose pods are used in tanning, on account of their great astringency. The leaves of the various kinds of Cassia are much used as purgatives under the name of Senna. Tamarindus, a handsome tree, yields the slightly laxative fruit known as Tamarind. The buds and flowers of Paullinia are used in dysentery. Crotalaria furnishes useful fibre for rope, etc. Arachis, the ground-nut, or pea-nut, is interesting in many ways. It ripens its fruit under ground. Its seeds are excellent for eating when roasted slightly, and if the roasting be continued, they can serve as a substitute for coffce. The oil expressed from them can be used for cooking, and is an excellent substitute for olive oil. Brya Ebenus furnishes a beautiful wood for fancy work. The handsome scarlet and black seeds of Abrus precatorius are used as ornaments, they are said to be poisonous. The roots form a good substitute for liquorice. The seeds of Rhynchosia are used for beads. Cajanus is the pigeon pea, valuable as an article of food. Phaseolus lunatus, the Lima bean, is an excellent table vegetable. Canavalia produces the red sea beans or Nickers. The beautiful horse-eye beans come from Mucuna urens, the hairs of which, known as Cowitch, are used sometimes as a mechanical anthelmintic. The juice of Cassia occidentalis is said here to be good for eruptions. Its roots are diuretic.

# Order XXXV. ROSACEAE.

Of the nine tribes into which this order is divided in Le Maout's and Decaisne's Botany, two only, *Amygdaleae* and *Chrysobalaneae*, are represented in the wild flora of the Bahamas. One other *Roseae* is cultivated in gardens.

## Tribe ROSEAE.

## 1. Rosa, Rosa.

Many kinds of roses are cultivated here, where they attain great perfection, and bloom throughout the year.

#### Tribe AMYGDALEAE.

1. Prunus sphaerocarpa, Sw. (Catesb.) Indigenous, West Indies.

#### Tribe CHRYSOBALANEAE.

# 1. Chrysobalanus Icaco, L. (Griseb.)

Cocoa-plum. Indigenous. West Indies and in Tropical Africa: This fruit is eaten fresh and preserved; the bark and leaves are a remedy in diarrhea

#### Order XXXVI. CRASSULACEAE.

## 1. Bryophyllum calycinum. S.

Life Plant; from Asia, now naturalized throughout West Indies and Tropical Africa. This plant is well known, from the power it has of producing buds from the margin of the leaves, which afterward become complete plants. Its leaves are said to be a cure for headache, and the juice is said to allay inflammation.

## Order XXXVII. RHIZOPHOREAE.

1. Rhizophora Mangle, L.

Mangrove. Indigenous. West Indies, Tropical America and Africa. The bark is very powerful as an astringent. It is used for tanning and stops bleeding. The fruit is said to be eatable. The Mangrove occupies the low swampy portions of all the Islands.

## Order XXXVIII. MELASTOMACEAE.

- 1. Tetrazygia cleagnoides, De. (Herrick.) Black-Torch Berry.
- 2. T. angustiflora, Gr. (Swains.)

# Order XXXIX. COMBRETACEAE.

- Terminalia Catappa, L.
   Almond Tree, Country Almond. Introduced from the old world.
- 2. Bucida Buceras, L. (Swains.)
  Olive Bark, Wild or Black Olive. Indigenous. West Indian.
- 3. Conocarpus erectus, L. (Swains.)

Button Tree, Zaragoza Mangrove. Alder. West Indian Variety (a) of Grisebach. The glabrous and silvery-haired varieties grow indiscriminately together in small woods on Fortune Island. (Eggers.) Indigenous and in West Indies, Tropical America and Africa. No special use.

4. Quisqualis Indica.

In gardens. Introduced from Tropical Asia and Africa.

This order possesses astringent properties, on which account the fruits of species of *Terminalia* are used for tanning. *T. Catappa* is a handsome tree. Its fruits are eatable and somewhat resemble almonds, whence its name.

#### Order XL. MYRTACEAE.

1. Jambosa vulgaris, De.

Rose Apple. Naturalized from India. Rose apples constitute a part of the food of *Macrowus taterhousii*, American Leaf-nosed Bat.

- 2. Eugenia buxifolia, W. Indigenous. West Indies.
- 3. Eugenia, sp., near E. Poiretii Dc. West Indies.
- 4. E. monticola, De. (*Griseb.*)
  Stopper, small leaved Rod-wood. Indigenous and in Jamaica.

5. E. axillaris, Poir.

Stopper, Broad-leaved or Red Rod-wood. Indigenous and in Jamaica.

- 6. E. lateriflora, Willd. Cuba.
- 7. E. uniflora, L. (*Griseb.*)
  Surinam Cherry. Indigenous and West Indian.
- 8. E. ligustrina, W. (*Griseb.*)
  Indigenous and West Indies and S. American.
- Pimenta vulgaris, W. A.
   Pimento, Allspice. In gardens. Introduced from Jamaica.
- 10. P. acris, W. A.

Bay Rum Tree, Wild Cinnamon, Bay Berry Tree. West Indies and South America. In gardens.

11. Psidium Guava, Radd.

Guava, Bay Plum. Naturalized originally from Continental Tropical America. Leaves astringent. Many members of this order contain aromatic volatile oils, and so are used in the preparation of condiments, e. g. Pimento. Others have eatable fruits such as Psidium, various species of Eugenia and Jambosa. Some of the oils, such as that of Pimento, are used in medicine as carminatives. The bark of the Guava is astringent.

### Order XLI. LYTHRARIEAE.

- Ammannia latifolia, L. Indigenous. West and East Indies.
- 2. Cuphea Parsonsia, P., Br.
  Indigenous. Jamaica and Cuba.
- 3. Lawsonia inermis, L.

  Henna Mignonette Tree. West and East Indies.
- 4. Lagerstroemia Indica, L.
  Crape Myrtle, Crape Plant. Cultivated; from Asia.

  Ammannia is used in India as a vesicant, from its acrid juice.

  Lawsonia yields the famous Henna, used as a dye in Assyria and the

  East. The Crape-myrtle is a beautiful garden-plant.

## Order XLII. GRANATEAE.

1. Punica granatum, L.

Pomegranate. Naturalized originally from Persia. The dried flowers, fruit and the bark of the root are used as anthelmintics.

# Order XLIII. ONAGRARIEAE.

1. Jussiæa angustifolia, Lam.

West Indies and South America.

2. Fuchsia sp.?

American. Cultivated in gardens. This order does not possess any marked properties.

## Order XLIV. TURNERACEAE.

1. Turnera ulmifolia, L.

Holly Rose, Sage Rose. Indigenous and West Indies.

2. Triacis microphylla, Gr. (Swains.)

Indigenous, and in Cuba and Hayti. Turnera ulmifolia has tonic and expectorant qualities.

## Order XLV. PASSIFLOREAE.

- Passiflora lunata, Juss.
   Indigenous and West Indies.
- 2. P. suberosa, L. Var. West Indies.
- 3. P. multiflora, L. West Indies.
- 4. P. rubra, L. West Indies and South America.
- 5. P. laurifolia, L. Water lemon. Antigua and Guadaloupe.
- 6. P. pectinata, Gr. (Hjalmars.)
  White Passion Flower. Indigenous, Turks Island and Fortune
  Island. (Eggers.)
- 7. P. oiliata, Ait. (Griseb.)
  White Passion Flower. Indigenous and Jamaica.
- 8. P. cuprea, L. (Linn.)
  Crimson or Maroon-colored Passion Flower. Indigenous an

Crimson or Maroon-colored Passion Flower. Indigenous and in Cuba.

9. Carica Papaya, L.

Papaw, Custard apple. Cultivated. West Indies. Tree and fruit full of acrid, milky juice, palatable when eaten with sugar, flavor of apricots; half ripe fruit pickled.

Some of the Passion flowers, as *P. rubra* (Dutchman's Laudanum), and, apparently, *P. laurifolia* are narcotic, others have eatable fruits. The fruit of the papaw is eaten and its seeds are said to be anthel-

mintic. The leaves can be used as a substitute for soap. A ferment similar to pepsin is present in the juice and leaves, and hence they have a remarkable power of making tough meat tender, though many Nassau people are skeptical about this.

## Order XLVI. CUCURBITACEAE.

1. Lagenaria vulgaris, Ser.

Bottle Gourd. Naturalized in all tropical countries. Originally from India.

2. Luffa acutangula, Rox.

Strainer vine. Naturalized from East Indies.

3. Momordica Balsamina, L.

Balsam Apple. Naturalized from Asia, probably. Known in Egypt from time of Moses to present day.

4. Cucumis sativus, L.

Cucumber. Cultivated.

5. C. Anguria, L.

Wild Cucumber. Known in Egypt and in Rome by the ancients. Originally from India.

6. C. Melo, L.

Musk-melon. Cultivated. Originally from India.

7. C. Citrullus, Schrad.

Water-melon. Cultivated. Originally from Tropical Africa.

8. Cucurbita Pepo, L.

Pumpkin. Cultivated. From Africa, probably.

9. C. maxima, L. Gourd.

10. Cucurbita sp.?

Squash. From tropics of the Old World.

11. Sechium edule, Sw.

Chow-chow, from Jamaica. Cultivated throughout West Indies. The plants of this order all possess an acrid, purgative property, though many are excellent fruits and vegetables. The seeds of Lagenaria are purgative, and the fruit of Luffa is violently so. From this latter plant is obtained the substance known as vegetable sponge. A decoction of the roots of the Balsam Apple is said to be good for jaundice, while the distilled water from its leaves and fruit is a wash for St. Anthony's fire. The oil from the fruit is good for burns.

# Order XLVII. CACTEAE.

1. Echinocactus, sp.?

Inagua and Southern Islands. Indigenous to Mexico and South America.

2. Melocactus communis, DC.

Turk's Head Cactus. Wild in Acklins Island, etc. One or two specimens in gardens in Nassau. Common in Turk's Islands, which obtained their name from its abundance.

3. Cereus Swartzii, Gr.

Dildo. Southern Islands, from Jamaica.

- 4. C. pellucidus.
- 5. C. repandus, Haw.

Torch Thistle. Southern Islands. From Jamaica.

6. C. triangularis, Haw.

Night-blooming Cereus, Prickly-withe. New Providence and all Islands, Jamaica and Mexico.

7. C. grandiflorus, Haw.

Night-blooming Cereus. All Islands; from Jamaica and Mexico.

8. Opuntia Tuna, Mill.

Prickly pear? Cochineal pear. Indigenous.

9. 0. Ficus-Indica, Mill.

Prickly Pear. Indigenous.

10. 0. triacantha, Mill.

Indigenous to Southern Islands. e.g. Watling's and Conception. This order possesses sub-acid and cooling properties. The fruit of *Opuntia* is eatable, and has diuretic properties.

### Order XLVIII. UMBELLIFERAE.

1. Hydrocoytle umbellata, L.

Pennywort, Sheep's bane. American and West Indian.

2. Pastinaca sativa, L.

Parsnip. Introduced originally from Europe.

3. Daucus Carota, L.

Carrot. Introduced, originally European.

4. Anethum graveolens, L.

Dill. Cultivated for its aromatic fruit, known as seeds, similar to caraway. Dill water is obtained by distilling the fruits. Introduced from Asia.

5. Foeniculum vulgare, Gærtn.

Fennel. Anise of New Testament. Introduced from Europe. Native of Southern Europe and Western Asia; appears to have been cultivated in Palestine.

6. Petroselinum sativum, Hoffman.
Parsley. Introduced from Europe.

7. Apium graveolens, L.

Celery. Introduced from Europe. Native of England and Europe and temperate regions of Southern hemisphere. Poisonous in native state.

8. Pimpinella Anisum, L.

Anise. Green Turtle Cay. (Herrick.)

Most of these plants are cultivated as vegetables. Some have medicinal properties also; *Hydrocotyle* is used as a remedy for leprosy. *Anethum* is carminative, said to be useful in dyspepsia and colic. *Fennel* is stimulating. The root of celery is aperient. The juice of parsley is emollient and diuretic, and said to cure dropsy.

# Order XLIX. CAPRIFOLIACEAE.

Lonicera sp.?
 Honey suckle. Indigenous. From Europe and America.

2. Viburnum Opulus, L.

Guelder Rose, Cranberry Tree, High Cranberry Bush, Snow Ball. In gardens. Common along Alleghenies in U.S., in wild state.

3. Sambueus nigra, L.

Elder. Introduced from Europe. All parts of the Elder are said to be laxative and diuretic; an ointment made from the leaves is useful in skin affections. *Viburnum* is emetic and purgative.

# Order L. RUBIACEAE.

1. Exostemma Caribaeum, R. S.

Sea-side beech, Prince-wood Bark, Jamaica Bark, West India Bark. Throughout the West Indies. Indigenous.

2. Hamelia, sp.? Prince-wood, Spanish Elm. Indigenous.

3. Catesbaea spinosa, L. (Swains.)
Lily-thorn, Catesby-thorn. Indigenous.

4. C. parviflora, Sw. Indigenous and in Cuba and Jamaica.

- Randia'aculeata, L. (Swains.)
   Indigo-berry, Ink-berry, Box-berry. Indigenous.
- 6. Gardenia florida, L. Cape Jasmine. In gardens. Cape of Good Hope.
- Guettarda elliptica, Sw. Velvet-seed. Indigenous and in Cuba and Mexico.
- 8. G. scabra, Lam. (Swains.)
  Indigenous, and in West Indies.
- Erithalis fruticosa, L.
   Var. odorifera Jacq. (Swains.) Indigenous and West Indian.
- 10. Erithalis, sp.?
- 11. Chiococca racemosa, Jacq. (Swains.)
  Snow-berry. Indigenous and W. Indian.
- Coffea Arabica, L.
   Coffee. A few plants. Introduced from Africa.
- 13. Strumpfia maritima, Jacq. (Swains.) Indigenous; on maritime rocks.
- 14. Psychotria undata, Jacq. (*Griseb.*) Indigenous and in Jamaica.
- 15. P. pubescens, Sw.
  Indigenous and in Jamaica.
- 16. Psychotria lanceolata, Nutt. (Swains.)
- 17 Spermacoce, sp.?
  Button-wood. Indigenous.
- 18. Galium hypocarpium, Endl.

  A weed. West Indies.
- 19. Stenostomum myrtifolium, Gr. (Swains.)
  Indigenous.
- 20. Ernodea littoralis, Sw.
  Branched Spurge. Indigenous and West Indian.
- 21. Phialanthus myrtilloides, Gr. (Swains.)
- 22. Borreria thymifolia, Gr. (Hjalmars.)
  Button-weed. Turk's Island. Indigenous.
- 23. Rhachicallis rupestris, De. (Swains.)

  Called by the fishermen, "sea-weed." "It is perhaps the most characteristic shrub of many of the larger Cays. It is prostrate or partly erect, and has dark-green, sprayey foliage and minute saf-

fron flowers. It is usually confined to rocks along the shores." (Herrick.)

24. Genipa clusiifolia, Gr. (Swains.)

Seven-year Apple. Fragrant, has colored flowers and a hard green fruit as large as a walnut.

Many members of this order possess valuable medicinal properties. Many are tonic and astringent. Quinine is obtained from one, and others have similar properties, especially *Exostemma*. The snowberry tree has a diuretic fruit. The root is used here as an antisyphilitic, and said to have attenuant properties, and to be cathartic and emetic.

# Order LI. COMPOSITÆ.

- 1. Vernonia Bahamensis, Gr. (Swains.) Flea-bane. Indigenous.
- 2. Ageratum conyzoides, L. Bastard Hemp-Agrimony. West Indies.
- 3. Eupatorium aromatisans, D. C.
  Thorough-wort, Hemp-Agrimony. West Indies.
- 4. E. villosum, Sw. (Swains.)
- 5. E. foeniculaceum, Willd. West Indies.
- 6. E. conyzoides, V. (Swains.)
  Indigenous and West Indies.
- 7. E. ageratifolium, De. (Swains.)
  Indigenous and in Cuba and Mexico.
- 8. E. integrifolium, Berb.
- 9. E. repandum, W. (Swains.)
- 10. Erigeron tenuis, F. & G. Flea-bane.
- 11. Baccharis angustifolia, Michx.

  Dog-bush. Indigenous and in Florida.
- 12. B. dioica, V. (Swains)
  Turk's Island. (Hjalmars.) Indigenous and in West Indies.
- Pluchea odorata, Cass. (Swains.)
   River-side Tobacco. West Indies and America.
- 14. P. purpurascens, De. (Swains.)

- 15. Pluchea, sp.
- 16. Xanthium strumarium, L. Cockle-bur. America.
- 17. Acanthospermum humile, De. Jamaica and Cuba.
- 18. Parthenium Hysterophorus, L. (Swains.) White-head, Wild Wormwood, Bastard Fever-few. Indigenous from Southern United States to Patagonia.
- Ambrosia artemisiaefolia, L.
   Wild Tansy. Indigenous. Cauada to Brazil.
- A. crithmifolia, De.
   Turk's Island. (*Hjalmars.*) Fortune Island, very common. (*Eggers.*)
   Indigenous.
- 21. Ambrosia, sp.?
- 22. Eclipta alba, Hask.
  Indigenous throughout the world.
- 23. Isocarpa oppositifolia, R. Ba. (Swains.)
- 24. Borrichia arborescens, De. (Swains.)

  Sea-side Ox-eye, Samphire, Rock Samphire. Turk's Island. (Hjalmars.) Indigenous.
- 25. Wedelia buphthalmoides, Gr. (Swains.) Ox-eye. Indigenous in W. Indies.
- W. carnosa, Rich. (Swains.)
   Marigold. Indigenous. West Indies and Tropical America.
- 27. Melanthera deltoidea, Rich. (Swains) Indigenous. West Indies.
- 28. Bedins bipinnata, L. Spanish Nettle, Bergar's Ticks, Shepherd's Needle. West Indies and throughout America and the old world.
- 29. B. leucantha, W. (Herrick.) Beggar's Ticks.
- 30. Salmea petrobioides, Gr. (Swains.) Indigenous.
- 31. Pectis linifolia, Less. Indigenous.
- 32. Helianthus tuberosus, L.

  Jerusalem Artichoke; cultivated in a few gardens; originally from America.

33. Lactuca sativa, L.

Lettuce; cultivated; from Southern Europe.

34. Artemisia vulgaris, L. (Herrick.)

Common Mug-wort. Green Turtle Cay. . .

35. A. hispida, Pursh. (Herrick.)

Bastard Geranium.

36. Zinnia multiflora, L. (Swains.)

Most of the plants in this order possess a bitter principle, which renders them touic. Erigeron is diuretic and much used in diseases of the kidneys. The species of Eupatorium are said to have stimulant and tonic properties for snake bites. The seeds of Vernonia are anthelmintic. The thickened juice of old plants of the common lettuce is highly narcotic, and is used as a substitute for opium in some cases, and as a nervine. Eupatorium is extensively used as a remedy for malaria.

# Order LII. GOODENOVIEAE.

1. Scaevola Plumieri, L. (Swains.)

Low shrub, along the sea coast. Abaco.

# Order LIII. ERICINEAE. (Heath Family.)

1. Clethra tinifolia, Sw.

Soap-wood, Wild Pear, Bastard Locust Tree. Indigenous and in Jamaica.

This plant does not appear to be of use for anything. The order has astringent properties. Its leaves and flowers are used as a diaphoretic; they are saponaceous and detergent.

# Order LIV. PLUMBAGINEAE.

1. Statice Bahamensis, Gr. (Hjalmars.)

Turk's Island, Marsh Rosemary, Sea Lavender. Astringent. Indigenous.

2. Plumbago scandens, L.

Leadwort, Toothwort. West Indies. The Plumbago contains a caustic coloring matter. They are said to be alexipharmic.

# Order LV. PRIMULACEAE.

1. Samolus Valerandi, L.

Water Pimpernel. Cosmopolitan. This plant is said to be an astringent.

# Order LVI. MYRSINEAE.

- Myrsine laeta, A. D. C.
   Bully Tree, Black Soft-wood. West Indies and South America.
- 2. Ardisia Pickeringia, Torr. and Gray. West Indian.
- 3. Ardisia, sp.?
- 4. Jacquinia armillaris, Jacq. (Herrick.)
  Joe-Bush.

The properties of this order are of little importance.

# Order LVII. SAPOTEAE.

1. Chrysophyllum Cainito, L.

Star-Apple. West Indies and South America. Tree 30 to 40 feet high. Popular name derived from transverse section of the seed which has 10 cells.

- 2. C. oliviforme, Lam. Var. Monopyrenum Sw. (Swains.)
  Damson Plum, Wild Star-Apple. West Indies.
- 3. Sapota achras, Mull. (Catesby.)

Sapodilla, said to be a variety (Catesb. Carol. 2, t, 87), Naseberry. Cultivated. West Indies.

- 4. Sideroxylon mastichodendron, Jacq. (Catesby.) Indigenous. West Indies.
- 5. Mimusops dissecta, R. Br. (Swains.)
  Bullet Tree. Indigenous. West Indies.
- 6. Dipholis salicifolia, A. D. C. Pigeon-wood, White Bullet-tree.
- Bumelia retusa, Sw.
   Ballato Tree. Indigenous. West Indies.
- 8. Bumelia, sp.

This order has several eatable fruits. Other trees are valuable for timber in other colonies, e. g. Sapodilla. The young of many of them yields a substance like India rubber. The bark of these trees is astringent and febrifugal.

# Order LVIII. JASMINEAE.

- 1. Jasminum officinale, L.
- 2. J. gracile, Andr.

And other species, in gardens from the old world. This order has no medicinal plants.

#### Order LIX. APOCYNACEAE.

- Thevetia nerifolia, Juss.
   In gardens. West Indies and South America.
- 2. Rauwolfia nitida, L. Indigenous. Jamaica.
- 3. Tabernaemontana citrifolia, Jacq. West Indies and South America.
- 4. Vinca rosea, L. Periwinkle. Naturalized from Old World.
- Plumiera rubra, L. Jasmine Tree, Frangipani; from South America.
- 6. P. obtisa, L. (Swains.)

  White Frangipani. Indigenous, This plant is exceedingly common in the windward islands of the group.
- Mandevillea, sp.
   Chili Jasmine. Naturalized from South America.
- 8. Echites suberecta, Jacq. (Rhabdadenia.)

  Described by Herrick as a common and showy climber, often completely covering the lower shrubbery, and distinguished by its large lemon-colored flowers, shining leaves and milky juice.
- 9. E. n. sp. ? near umbellata, Jacq. (Catesb.)

Wolff road, New Providence. Shrub about 8 feet high, glabrous, flowers in axillary cymes, pedicels geminate, corolla white with violet-purple throat. Anthers hispid on back, follicles united at tips 6-8 inches long, other characters like *umbellata*. Corolla limb 6 inches long. Calyx lobe  $1-1\frac{1}{2}$  inches, Coma 4 inches, 8 Anthers  $1\frac{1}{2}-2$  inches.

10. E. neriandra, Gr. (Swains.)

Harold's road New Providence, and common.

- 11. E. paludosa, Vahl. (Swains.)
- 12. E. Sagræi, A. D. C. (Swains)
- 13. E. Jamaicensis, Gr. (Swains.)
- 14. Nerium Oleander, L.

Oleander, Rose Laurel, Sweet Oleander, South Sea Rose. Naturalized from India.

- 15. Vallesia glabra, Car. (Swains.)
- 16. Forestiera cassinoides, Poir. (Hjalmars.) Turk's Island.

Many of the plants of this order are intensely poisonous and all are to be suspected. Some are strongly purgative, while the bark

of others is tonic. The Periwinkle is said here to have sedative properties, resembling those of opium; an infusion of its flowers is said to be an excellent wash for inflamed eyes. Many plants of this order furnish caoutchouc. *N. Oleander* is narcotic, herpetic, and is used for itch.

# Order LX. ASCLEPIADEAE.

- 1. Metastelma, sp.? Indigenous. W. Indies.
- 2. M. Cubense, Dees. (Swains.) Indigenous and in Cuba.
- 3. Vincetoxicum palustre, Gray.
  West Indian and European. (Herrick.)
- 4. Seutera maritima, Reichenb. (Swains.)
  Indigenous. American and West Indian.
- Asclepias Curassavica, L. Bastard Ipecacuanha, Red-head, Blood-flower. West Indies and tropical America.
- 6. A. paupercula, Michx. (Herrick.) Milkweed.
- 7. Oxypetalum, sp.?
  West Indies and S. America.
- 8. Stephanotis floribunda, Thun.
  In gardens; from Madagascar.
- 9. Hoya carnosa, Br. Wax-plant. In gardens; from tropical Asia.
- 10. Stapelia maculosa.

Carrion flower; from Cape of Good Hope. A pot flower. This order has similar properties to the preceding. Asclepius, as indicated by its popular name, is used as an emetic like true Ipecacuanha. Vincetoxicum is also an emetic. Many species are cultivated for the beauty of their flowers. The milky juice is always to be suspected. Some species are said to be antidotes to snake bites, e. g. Vincetoxicum.

# Order LXI. LOGANIACEAE.

1. Spigelia anthelmia, L.

Worm-grass, Pink-root. Indigenous. West Indies and America. This plant, poisonous when fresh, is, in the dry state, an excellent vermifuge.

### Order LXII. GENTIANEAE.

Eustoma exaltatum, Gr.
West Judies and America.

2. Sabbatia gracilis, Salisb. (Herrick.)

Joe's Cay, off Little Abaco. A delicate 'plant which has large rose-colored flowers. This order has tonic and febrifugal properties from the bitter principle which is present in its members.

# Order LXIII. HYDROLEACEAE.

1. Nama Jamaicensis, L.

West Indies and America. No use is known.

## Order LXIV. CONVOLVULACAAE.

- 1. Ipomoea Batatas, Lam.
  Sweet Potato. Naturalized from South America.
- 2. I. sidifolia, Chois.
  Christmas-flower. West Indies.
- 3. I. Pes-capri, Sw.
  Sea-side Potatoe. West Indies and all tropical countries.
- 4. I. coccinea, L. West Indies and America.
- I. purpurea, Lam. United States, West Indies and America.
- 6. I. Bona-nox, L. (Dolley.)

Moon-flower. Native of India; pure white flowers, 5-6 inches in diameter, opening at night and giving out a delicate perfume.

- 7. I. arenaria, Stend. (Swains.)
- 8. I. Carolina, L. (Catesb.)
  On rocks.
- I. cathartica, Poir. (Swains.)
   Morning-glory. West Indies and S. America.
- 10. Convolvulus micranthus, R. S. West Indies and South America.
- 11. C. Jamaicensis, Jacq. (Swains.)
  Indigenous and West Indies.
- 12. Evolvulus arbuscula, Poir. (Swains.)

Indigenous and W. Indies. The plants of this order possess in their rhizomes a highly purgative principle, Jalap; except I. Batatas, in which it is replaced by starch, which renders the rhizome of this plant highly nutritious.

- 13. E. sericeus, Sw. (Swains.)
  On arid maritime rocks.
- 14. E. linifolius, L. (Swains.)
  Arid pastures.
- 15. E. mucronatus, Sw. (Hjalmars.) Turk's Island.

### Order LXV. DICHONDREAE.

1. Dichondra repens, Forst.

This small order has no known properties.

# Order LXVI. CUSCUTEAE.

- Cuscuta Americana, L. Dodder. Love Vine; Mexico, West Indies and S. America.
- 2. C. obtusiflora, Kth. (Swains.)

Love vine. Indigenous and in Florida and S. America.

Plants of this order are parasitic on other plants; they are said to be purgative. An infusion is used here as a wash for sores on the head.

# Order LXVII. BORRAGINEAE.

- Tournefortia volubilis, L. (Swains.)
   Basket withe. Indigenous. West Indies and South America.
- 2. Tournefortia gnaphalodes, R. Br. (Swains.)
- 3. Heliotropium parviflorum, L. (Swains.)
- 4. Beurreria tomentosa, G. Don. (Swains.)

Currant Tree. Indigenous. West Indies. These plants are harmless and mucilaginous and of little value as medicinal agents.

# Order LXVIII. CORDIACEAE.

- 1. Cordia Lima, R. S. (Swains.) Indigenous and in Hayti.
- C. Sebestena, Jacq. (Swains.)
   Scarlet Cordia, Aloe Wood. West Indies and S. America.
- 3. C. gerascanthoides, Kth.
  Prince-Wood, Prince-Tree, Spanish Elm. West Indian; Dominican rose wood.

Plants of this order have similar properties to those of the preceding one. Prince-wood is a handsome light brown wood, not to be confounded with tonic Prince-wood bark, the product of *Exostemma Caribaeum*. Vid. order L.

# Order LXIX. SOLANACEAE.

- Nicotiana Tabacum, L.
   Tobacco. Introduced, originally from S. America.
- 2. Petunia, sp.?
  Cultivated in gardens. S. America.
- 3. Datura Stramonium, L.
  White Datura, Prickle-Bur, Thorn-Apple. Cosmopolitan, in warm countries.
- 4. Datura Tatula, L. Violet Datura.
- Brugmansia suaveolens, G. Don.
   Sweet-smelling Datura, Naturalized from S. America.
- 6. Lycopersicum Humboldtii, Dun. Small oval Tomato, originally from Peru.
- 7. L. esculentum, Mull. Cultivated Tomato.
- 8. Capsicum frutescens, L. Cayenne Pepper, Bird Pepper; from South America.
- 9. C. annuum, L. Guinea Pepper, Chilies.
- 10. Capsicum, sp.?
  Other kinds of peppers are grown.
- 11. Solanum nodiflorum, Jacq.

Night shade, Branched Calalu. West Indies. Used by the Myal men or Obia men of the West Indies as a narcotic, to produce a profound sleep of a certain duration. Vid. Edwards, l. c., Vol. 2, p. 297.

- S. Bahamense, L. (Swains.)
   Canker Berry. Indigenous and in Jamaica and Mexico.
- S. Melongena. L.
   Egg-plant, Mad-Apple. Cultivated; from tropical Asia.
- 14. S. tuberosum, L. Irish Potato.

- 15. S. igneum.
- 16. S. aculeatissimum, Jacq. (Herrick.)
  Apple-of-Sodom. Green Turtle Cay.
- Brunfelsia, sp.? (Herrick.)
   A tall shrub. Green Turtle Cay.
- 18. Physalis Linkiana. Griseb.

Winter's Cherry. West Indies.

Very many plants of this order possess useful medicinal and other properties. Tobacco does not grow well in the Bahamas, owing to the poor soil. In medicine, *Datura* is used externally as a local stimulant; the seeds are strongly narcotic and poisonous. In spasmodic asthma it is useful, especially when smoked. Externally, it is an anodyne in its action. Here its juice, made with lard into an ointment, is said to be good for ulcers and burns. The juice of the Tomato is used in the Bahamas as an eye wash, and for a cooling wash generally. The various specimens of *Capsicum* are stimulant, carminative and diuretic and are so used here. The stem, leaves and fruit of the species of *Solanum* are narcotic, antispasmodic and diuretic.

# Order LXX. CESTRINEAE.

- Cestrum pallidum, Lam. (Swains.)
   Bastard Jasmine, Poison berry. Indigenous and West Indies.
- 2. C. diurnum, L. Indigenous.

This order has narcotic and diuretic properties.

#### Order LXXI. SCROPHULARINEAE.

1. Scoparia dulcis, L.

Liquorice weed, Sweet Broom-Weed. West Indies, tropical America and all tropical countries.

- 2. Capraria biflora, L. (*Hyalmars.*) Turk's Island. Goat-weed, West Indian Tea. Indigenous in West Indies.
- 3. Buchnera elongata, Sw. West Judian.
- 4. Gerardia purpuræ.
- Linaria vulgaris, Mill.Toad Flax. Naturalized from Europe.
- 6. Verbascum pulverulentum, Mull. (Herrick.) 'Green Turtle Cay.

- 7. Russelia juncea, Zuccar. (Dollev.)

  New Providence. Probably introduced from Mexico.
- 8. Herpestis Monniera, Kth. (Swains.)

The plants of this order must be suspected, as many are poisonous. *Scoparia* is tonic and febrifugal. *Capraria* is sometimes used as tea in the West Indies and Central America.

# Order LXXII. BIGNONIACEAE.

- Tecoma leucoxylon, Mart. (Swains.)
   White wood, white wood cedar. West Indies.
- T. stans, Juss.
   Yellow Popper, Yellow Elder, Bignonia. West Indian and tropical American.
- 3. T. radicans, Juss.

  Red Trumpet-flower, Trumpet Creeper; in gardens; tropical America.
- 4. T. Capensis, G. Don. In gardens; from Brazil.
- 5. Jacaranda caerulea, Gr. (Swains.) Cancer-Plant. Indigenous.

Some species of *Tecoma* have astringent properties. The leaves of *Jacaranda* are used in this colony as a cure for cancer, and as an anthelmintic in Panama. *Jacaranda Brasiliensis* Ger. 'Polisander.' Fr. 'Polisandre'—is a beautiful wood for cabinet making, and might be introduced and cultivated with advantage. Smith (Dict. Econ. Bot.) gives this as 'Palissander' or 'Palixander-wood.' The bark of *Tecoma leucoxylon* is supposed to be an antidote to *Manchineel*.

# Order LXXIII. ACANTHACEAE.

- Blechum Brownei, Juss.
   Tropical America and Asia.
- Justicia Carthaginensis, Jacq.
   Violet-Justicia. West Indies and South America.
- 3. Justicia, sp.
  Several kinds of Justicia are cultivated in gardens on account of their flowers.
- 4. Anthacanthus spinosus, Gr. (Swains.) Indigenous and West Indian.

5. Dicliptera assurgens, Juss. (Swains.)

Indigenous and West India.

The two last plants are commonly known as Justicia. This order has no important properties.

# Order LXXIV. SESAMEAE.

1. Sesamum orientale, L.

Benne Oil plant. Naturalized in West Indies from East Indies.

2. Martynia diandra, Glox.

West Indies and tropical America.

The uses of the Benne plant are well known, the seeds are eaten for food like rice. The oil is pungent when first drawn, but later is mild and used for salads, in the adulteration of olive oil and in the manufacture of soaps. The plant is an important one in bush medicine. A decoction of the leaves is said to be useful in coughs, pleurisy, inflammation of the lungs and hard tumors and to cool the blood. The leaves and seeds mixed with honey form a poultice for tumors. The dried leaves powdered over an ulcer will dry it up and heal it. The oil is said to be good for the itch and for pains in the stomach.

# Order LXXVI. VERBENACEÆ.

- Tamonea verbenacea, Sw. West Indies.
- 2. T. scabra.
- 3. Tamonea, sp.
- 4. Verbena triphylla.

Lemon scented Verbena. In gardens, from tropical America. Some other species are cultivated in gardens.

Bonchea Ehrenbergii, Cham.
 W. India and tropical America.

- Stachytarpha Jamaicensis, V. (Swains.)
   Blue-flower, Vervain. West Indies and tropics of both worlds.
- 7. Lippia nodiflora, Rich. (Swains.)
  Indigenous and almost cosmopolitan.
- 8. L. geminata, Kth. Var. microphylla. (Hjalmars.) Turk's Island.
- Lantana crocea, Jacq. (Swains)
   Wild Sage, yellow. Indigenous in W. Indies.
- L. involucrata, L.
   Wild Sage, white or lilac. West Indian and Indigenous.

11. L. Camara, L. (Swains.)

Wild Sage, yellow changing to red. Indigenous and West Indian.

12. Citharexylum cinereum, L. Fiddle-wood, Savanna Wattle. West Indies.

Duranta Plumieri, Jacq. (Swains.)
 Pigeon-berry, Blue-flower. Indigenous and West Indies.

Petitia Domingensis, Jacq.
 Yellow Fiddle-wood, Spur Tree. Greater Antilles.

Avicennia nitida, Jacq.
 "Courida" or Black Mangrove. Bark astringent.

16. Clerodendron Balfourii.

Mobile Cologne-plant, "white blossoms like tiny double roses, with many garnet sepals and tracts." Dickinson & Dowd, Loc. cit., p. 149.

Most of the plants of this order are aromatic and bitter, but none have important medicinal properties. The wild sage is used here in infusion as a febrifuge and purgative. *Stachytarpha* is said to be purgative and anthelmintic. In Liberia, it is used to produce abortion. Blue-flower tea is a well-known remedy here for fevers; the leaves are sometimes used to adulterate Chinese tea.

#### Order LXXVI. LABIATAE.

- Ocimum micranthum, Willd. Basil. West Indian.
- 2. Coleus, sp.?
  Several species cultivated in gardens for ornament.
- 3. Hyptis suaveolens, Poit. Spikenard. West Indies.
- 4. Salvia occidentalis, Sw. Wild Sage. West Indies.
- 5. S. coccinea, L. Crimson Salvia. West Indies.
- 6. S. serotina, L. (Swains.)
  Several species of Salvia, e. g. S. splendens, are cultivated in gardens for the flower.
- 7. Nepeta coerulea, L.
  Blue catnip. Introduced from the old world. (?)

- 8. N. Cataria, L.
  White Catnip. Introduced from old world.
- Leonurus Sibiricus, L.
   Motherwort, Introduced. Cosmopolitan.
- 10. Leonotis nepetaefolia, R. Br. West Indian.
- 11. Teucrium Cubense, L. (Swains.)
  Indigenous, and tropical America.
- 12. T. inflatum, Sw. West Indies and tropical America.
- 13. Marrubium vulgare, L.

Horehound. Introduced from old world.

None of the plants of this order are poisonous, and they are usually aromatic and carminative, and sometimes tonic and stomachic. Basil is said to be stimulant and diuretic, and Salvia has similar properties. Teuerium is a tonic from the presence of a bitter principle. Horehound is also a tonic and is a well-known remedy for coughs. Many of these plants, e. g. Nepeta and Leonurus, are used in bush medicine. They are probably not of very much use.

PROCEEDINGS OF THE ACADEMY OF

# Order LXXVII. PLANTAGINEAE.

1. Plantago major, L.

Plantain. Almost cosmopolitan. The leaves are slightly astringent, and an eye wash is distilled from the entire plant.

#### Order LXXVIII. NYCTAGINEAE.

1. Mirabilis Jalapa, L.

Marvel of Peru, Four o'clock Flower, False Jalap. West Indies and South America.

- Bougainvillia spectabilis, Poir.
   Wild. In gardens; from South America.
- Pisonia aculeata, L. Cockspur. West Indies and South America.
- 4. P. inermis, Jacq. West Indies.
- 5. P. obtusata, Sw. West Indies.

6. Boerhaavia scandens, L. (Swains)

The roots of the plants of this order are purgative and emetic. *Mirabilis* acts similarly to the true Jalap, but is less efficacious, and is sometimes administered for dropsy. *Pisonia* is said to be febrifugal and antisyphilitic.

# Order LXXIX. PHYTOLACCACEAE.

1. Phytolacea icosandra, L.

Pokeweed, Foxglove, Redweed, Spanish Calalu. West Indies and South America.

- 2. Rivinia laevis, L. Hoop-Withe.
- 3. Petiveria alliacea, L.

Guinea-hen's Weed, Strong Man's Weed. Southern United States, Mexico and West Indies.

4. Suriana maritima, L. (Hjalmars.)
Turk's Island.

Phytolacea is highly purgative; Petiveria is febrifugal and diuretic.

## Order LXXX. POLYGONEAE.

- 1. Polygonum glabrum, W. (Swains.)
- Coccoloba uvifera, Jacq. (Swains.)
   Seaside Grape, Lobe Berry. West Indies and S. America.
- 3. C. leoganensis, L. Grape. Indigenous, and Jamaica and Hayti.
- 4. C. tenuifolia, L. Grape. Indigenous and Jamaica.
- 5. C. punctata, L. Grape, Small-leaved Pigeon-wood. West Indies.
- 6. Antigonon leptopus, Hook.

Coral Vine, Coral Plant. Cultivated for ornament in gardens; West Indies and South America.

The different species of *Coccoloba* are well known here as Sea Grape. The fruits are eatable. The wood and bark yield a very strong astringent known as American Kino. Bark used for tanning.

#### Order LXXXI. AMARANTACEAE.

1. Achyranthes aspera, L. West Indies and all hot countries.

2. Iresine celosioides, L.

Juba's Bush. West Indies, Southern United States and South America.

3. Euxolus viridis, Moq.

West Indies, Southern United States and almost all hot countries.

- 4. Amblogyna polygonoides, Raf. (Swains.)
- 5. Amarantus spinosus, L.

Amaranth, Prickly Calalu. West and East Indies, South America and Africa.

- 6. A. paniculatus, L. (Linn. Mart.)
- 7. Gomphrena, sp. ? (Herrick.)

Turtle Grass. "Running prostrate plant with turgid stems and leaves."

- 8. Alternanthera Achyrantha, R. Br. (Swains.)
- 9. A. flavescens. Moquin. (Herrick.)
- 10. Philoxerus vermiculatus, R. Br. (Swains.)

The properties of this family are unimportant. Achyranthes is said to be an astringent and diuretic.

# Order LXXXII. CHENOPODIEAE.

- 1. Batis maritima, L. (Hjalmars.)
  Turk's Island.
- 2. Chenopodium ambrosioides, L.

Goose-foot, Hedge-mustard. West Indies, South America and in all warm countries.

3. C. murale, L.

Naturalized from Europe. Some kitchen vegetables, such as Spinach (*Spinacia oleracea*) and Beet (*Beta vulgaris*, Moq.) belong to this order. *Chenopodium* is an anthelmintic and antispasmodic.

- 4. Suaeda linearis, Torr. (Herrick.)
- 5. Salicornia ambigua, Michx. (Hjalmars.)
  Turk's Island.

# Order LXXXIII. BASELLEAE.

1. Basella alba, L.

White Spinach, Indian Spinach, called Malabar Night in Kew Gardens. Introduced from East Indies.

2. Boussingaultia baselloides, Kunth. Introduced from South America. Basella alba is eaten as a pot herb.

# Order LXXXIV. LAURINEAE.

1. Persea gratissima, G.

Alvocado Pear, Alligator Pear, Avocado Pear. Naturalized from Mexico. Leaves used as a medicine. Balsamic, pectoral, vulnerary; seeds astringent.

2. Persea Indica.

Madeira wood. Naturalized from Africa.

- Nectandra sanguinea, Rottb. (Swains.)
   Yellow or Lowland Sweet-wood. Indigenous and West Indies.
- 4. N. Willdenoviana.
- 5. Cassyta Americana, Ns.

Dodder Laurel. West Indies and South America.

The fruit of *Persea gratissima* is well known and esteemed. *Nectandra* furnishes good timber, as does *P. Indica*. The plants of this order have tonic and stimulating properties.

## Order LXXXV. URTICEAE.

1. Fleurya aestuans, Gaud.

Nettle. West and East Indies.

2. Pilea microphylla, Liebm.

Nettle. Jamaica and Cuba.

These plants have no known properties.

## Order LXXXVI. MOREAE.

1. Brosimum Alicastrum, Sw.

Bread-nut. West Indies and Mexico. Nut eatable when roasted. Wood has fine grain like Mahogany. Nuts eaten by Macrotus. Waterhousii, American leaf-nosed bat.

2. Artocarpus incisa, L.

Bread-fruit. Naturalized from East Indies. Introduced into-Jamaica in 1793 after many unsuccessful attempts, by Capt. Wm., Bligh,\*

The bark is very tough and is beaten out into fine white cloth. by the natives of Otaheite and other Islands of the Pacific.

3. Ficus pertusa, L.

Fig. Jamaica and West Indies.

4. F. trigonata, L.

Wild Fig. Green Turtle Cay.

<sup>\*</sup> Vide Edwards' Hist. Brit. Col. in the W. I. vol. I. Preface to 2nd Edition, p. 30.

5. F. elastica, Roxburgh.

Caoutchouc Tree. In gardens. Introduced.

6. F. Carica, Willd.

Fig. This furnishes the well-known fruit; from the old world.

7. Maclura tinctoria, Don.

Fustic. Berries eaten by bats. South America.

The milky juice of many members of this family is poisonous. The nut of *Brosimum* is eaten in Jamaica. *Maclura* gives a valuable dye. The berries of the latter tree furnish a gargle for sore throat used in this colony. Its ashes are also said to be good for rheumatism. The plants of this order possess tonic and astringent properties and furnish caoutchouc. Several species of *Ficus* are grown for ornament.

#### Order LXXXVII. CELTIDEAE.

Sponia Lamarkiana. Desc. (Swains.)
 Jamaica Nettle Tree. Indigenous. No known use.

# Order LXXXIII. MYRICEAE.

1. Myrica cerifera, L.

Wax Myrtle, Bay berry.

Introduced from America. This plant is valuable for the wax which is obtained from its fruit, and which can be used for lighting. Its roots are a violent purgative, and an infusion of its bark is said to be a remedy for scrofula.

## Order LXXXIX. CASUARINEAE.

1. Casuarina equisetifolia, Forst. (Eggers.)

To a Tree. Introduced from the East and planted as an ornamental tree. The wood (Beef-wood) is hard and heavy, and can be used in ship building. The bark is astringent and useful (in a decoction) in diarrhea; healing to fresh-cut wounds.

This family is widely distributed. Indian Archipelago and Pacific Ocean. The Australian species are called "She Oak, Swamp Oak, Forest Oak, Beef-wood." The wood is also known as Ironwood. It takes a fine polish (war clubs). Bark furnishes a dye. (Smith Diet. Econ. Pl.)

## Order XC. EUPHORBIACEAE.

1. Drypetes sp.?

West Indian. Indigenous.

- Cicca disticha, L. Otaheite Gooseberry. Introduced from India.
- 3. Phyllanthus Niruri, L. All tropical countries.
- 4. P. angustifolius, Sw. Hard-head Bush, Seaside Laurel.
- 5. P. falcatus Sw. (Swains.)
  Jamaica and West Indies.
- 6. P. sp. ? Rock bush. Astringent.
- Jatropha Curcas, L.
   Physic-nut. South American. Naturalized in all tropical countries.
- 8. J. gossypifolia, L. (Swains.)
- 9. Janipha Manihot, Kth. Cassava. Cultivated; from South America.
- Ricinus communis, L.
   Castor Oil Plant, Palma Christi. Naturalized; from East Indies.
- Croton Cascarilla, L. (Swains.)
   Linear-leaved variety. Cascarilla, Wild Rosemary. Indigenous.
- C. Eluteria Sw. (Swains.)
   Cascarilla, Eleuthera. New Providence. Indigenous.
- 13. C. flavens, L. Yellow Balsam. West Indian.
- 14. C. flocculosus, Geis. (Swains.)
- C. niveus, Jacq.
   West Indies and South America.
- 16. C. lucidus, L. var. pubigerus. (Swains.)
  Basket-hoop. Indigenous and in West Indies.
- 17. C. lobatus, L.
  West Indies and South America.
- 18. C. Ujalmarsonii, Hjalm. (Hjalmars.)
  Turk's Island, also frequent on Fortune Island. (Eggers.)
- 19. C. humilis, L. var. origanifolius, Lam. (Swains.)
- 20. Argythamnia sericea, Gr. (Swains.) Indigenous.
- 21 Acalypha polystachya, Jacq. West Indies.

22. A. persimilis. West Indies.

23. A. alopecuroides.
West Indies.

24. Pera, sp.?

25. Sapium laurifolium, Gr.
Gung tree. West Indies and Cuba.

26. Hura crepitans, L.

Sand-box tree. West Indies and South America. Fruit acrid, emetic rubefacient, poisonous; juice causes injury to the eyes.

27. Excecaria lucida, Sw. West Indies.

28. E. Cubana. West Indies.

29. Euphorbia buxifolia, Lam.
Spurge. Indigenous and West Indian.

30. E. serpens, Kth.
Indigenous and West Indian.

31. E. maculata, L.

Eye bright. All tropical countries.

32. E. pilulifera L. All tropical countries.

33. E. hypericifolia, L. West Indian, Southern United States and Europe.

34. E. punicea, Ait. (Swains.)
Wild Physic-nut. Indigenous.

35. E. heterophylla, L. Var. prunifolia, Jacq. (Swains.) Joseph's-Coat. Indigenous and West Indies.

36. E. (Poinsettia) splendens.
In gardens. Native of Madagasear.

37. Euphorbia, sp.?

38. Hippomane Mancinella, L.

Manchineel. West Indies and South America. A common tree in Fortune Island. (*Eggers.*)

The Euphorbiaceae have a milky juice, which in almost every case is more or less poisonous, but it becomes innocuous when heated. From this property of the juice, it is possible to make use of the valuable starch which some of the plants contain, e.g. Tapioca, obtained from Janipha Manihot. Sapium, Hura and Excoccaria are

especially poisonous, and Hippomane Mancinella, the true Manchineel, the most poisonous of all. Cicca has an acrid, eatable fruit. Phyllanthus is used here as a wash for sores, being very astringent. Jatropha is a drastic purgative. As mentioned above, washing and heating removes the poisonous juice which, concentrated by boiling, becomes a sauce known as Cassareep. Ricinus furnishes the well-known castor oil. The Cascarilla or Sweet-wood bark exported from this colony comes from a species of Croton; it is an aromatic tonic; also purgative and emetic. The various species of Euphorbia are purgative.

# Order XCI. NEPENTHEAE.

Nepenthes, sp.?
 In gardens. Asia and Africa. No known properties.

#### Order XCII. LORANTHACEAE.

- 1. Loranthus parviflorus, Sw. Mistletoe: West Indies.
- 2. L. uniflorus, Jaeq. (Catest.)
  Mistletoe. Indigenous and W. Indian. The mistletoe is used in this colony as an antisyphilitic. Its properties appear to be very important.
- 3. Phoradendron rubrum, Gr. (Catesb) Fortune Island. (Eggers.)